



Session: Building Research and
Development Capacity to combat
neglected tropical diseases

17th November 2023

Introduction to GSK Global Health and the Tres Cantos Open Lab



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Global Health Medicines R&D

Global Health is a cornerstone of our ESG agenda

Global Health is one of the areas of responsible business that matter most to us

Our purpose is to unite science, technology and talent to get ahead of disease together



Photo: GSK. Mbagathi Clinic Nairobi

Why we are committed to Global Health

We will change the trajectory of high burden diseases in lower-income countries with a focus on infectious diseases



Photo: GSK. Ratna, LF Patient, Nepal

How we will change the trajectory

Our 3-pronged approach

01

Global Health R&D

Developing new medicines & vaccines against high burden diseases in lower-income countries with a focus on infectious diseases

02

Access

Pursuing equitable access to **GSK's portfolio & pipeline**

03

Health System Strengthening

Build partnerships to strengthen health systems and ensure our innovation reaches **patients who need it most**

GSK GLOBAL HEALTH TEAM

Dedicated team of more than 200 outstanding people and **two research centres** in Siena, Italy and Tres cantos, Spain



Photo: GSK. Mbagathi Clinic Nairobi

How we will change the trajectory

Our commitment to **Global Health R&D**

GSK is investing **£1bn over ten years** to accelerate Global Health R&D



Focusing on new medicines & vaccines to prevent and treat TB, malaria, AMR, HIV*, enteric diseases & NTDs

* Through ViV



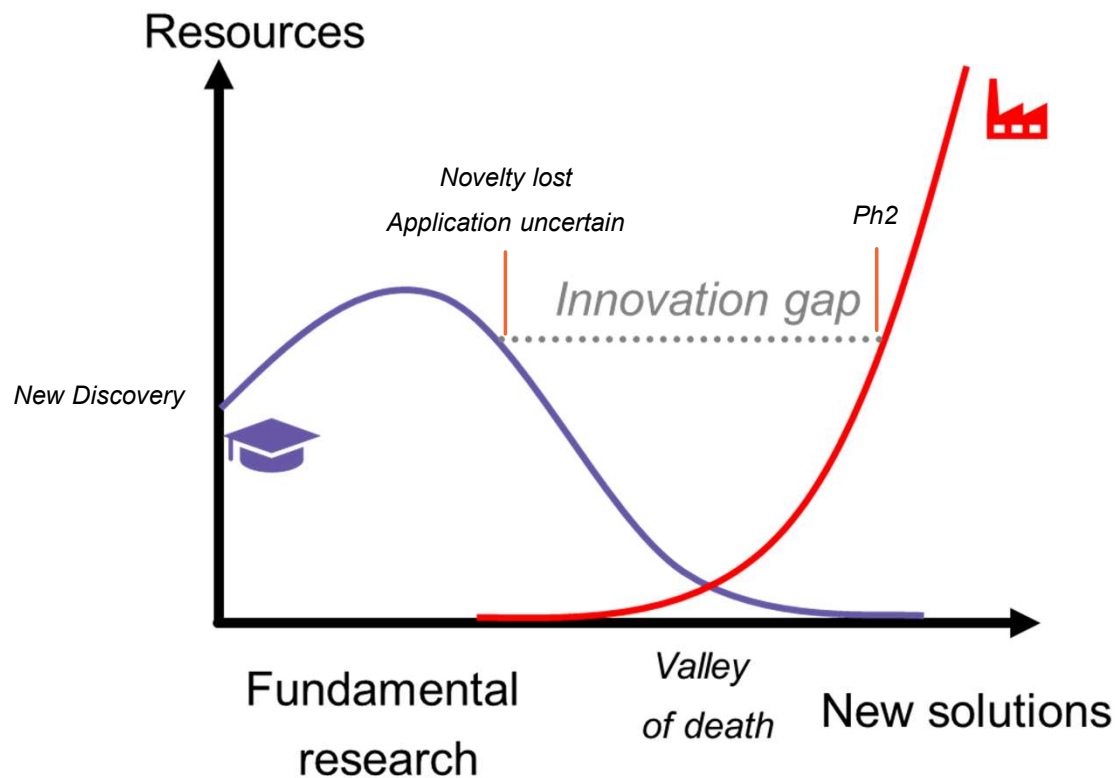
Photo: GSK. Tres Cantos

The Tres Cantos Open Lab

- A unique collaborative science-driven model to support research in endemic infectious diseases
- Integrated within the GSK R&D site in Tres Cantos (Madrid, Spain)
- Why?
- What
- How



The What? Addressing the innovation gap



- On therapeutics areas affecting HIC, the innovation gap is partially fill with Biotechs, spin-offs, etc
- Few oppotunities to develop innovation for endemic infectious diseases

The how? Overcoming 'structural' barriers

A collaborative project-based environment integrating academic and GSK teams

The distinguish features:

1. Co-location of scientists from both sectors in the same laboratory
2. The greater sharing of intellectual property
3. In partnership with the Tres Cantos Open Lab Foundation (TCOLF) – provides funds and expertise



FOUND IN TRANSLATION



Surmounting structural barriers to tackle endemic infectious diseases

Felix Calderón¹, Alan H. Fairlamb², Mike Strange⁴, Pauline Williams⁴, and Carl F. Nathan³

nature DRUG
REVIEWS DISCOVERY

Tres Cantos Open Lab: celebrating a decade of innovation in collaboration to combat endemic infectious diseases

Felix Calderón¹, Lluís Ballell¹, David Barros¹, Graeme Bilbe², Nicholas Cammack³, Raquel Gabarró¹, Audra Halsey⁴, Penny M. Heaton⁵, Gagandeep Kang⁶, Valerie Mizrahi⁷, Carl Nathan⁸, Mike E. Strange⁹, Pauline M. Williams⁹, Elizabeth A. Winzeler¹⁰ and Alan H. Fairlamb¹¹

Figure adapted from

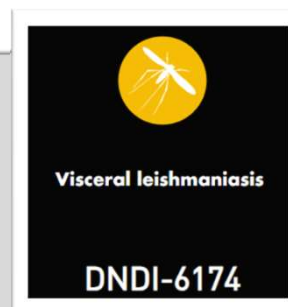
Calderon, F. *et al.* J Exp Med (2022) 218(9):e202114187

Calderon, F. *et al.* Nat Rev Drug Discov (2022), 20, 799-800

Impact in NTDs / areas of success

- Enabling discovery research by generation and publications of:
 - High-quality public datasets
 - Lead compounds with in vivo activity to accelerate community discovery
 - Novel physiologically relevant assays
 - Critical role in the identification of novel clinical candidates

New Compound Sets Identified from High Throughput Phenotypic Screening Against Three Kinetoplastid Parasites: An Open Resource



STUDY PROTOCOL

Open Access

Comparison of 8 weeks standard treatment (rifampicin plus clarithromycin) vs. 4 weeks standard plus amoxicillin/clavulanate treatment [RC8 vs. RCA4] to shorten Buruli ulcer disease therapy (the BLMs4BU trial): study protocol for a randomized controlled multi-centre trial in Benin



Catalyzing clinical research

Figures adapted from
Peña, I. *et al.* Sci Reports (2015) 5:8771
Johnson, R. C. *et al.* Trials (2022) 23:559
<https://dndi.org/research-development/portfolio/dndi-6174/>



Thank you for your attention